Attorney Docket No.: Q81505

## **REMARKS**

Claim 55 was amended to recite a positive step and for clarification. No new matter has been added, and entry of the Amendment is respectfully requested.

Claims 37-68 are pending, of which claims 38-54, 67 and 68 are withdrawn from consideration as being directed to a non-elected invention.

Claims 37, 55-60, 63 and 64 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kawano (JP 2003-17420; Machine translation was used for examination purposes) in view of Guo et al (US 2004/0119063, "Guo").

Claims 61 and 62 were rejected under 35 U.S.C. §103 (a) as being unpatentable over Kawano in view of Guo and further in view of Seki et al (US 5,129,986, "Seki").

Claims 65 and 66 were rejected under 35 U.S.C. §103 (a) as being unpatentable over Kawano in view of Guo and further in view of Anayama (US 5,862,166).

The above rejections should be withdrawn for the reasons set forth in the Remarks section of the Second Response under 37 C.F.R. § 1.116 filed March 29, 2010.

In the Advisory Action dated April 15, 2010, the Examiner reiterated his position that it is reasonable to assume that one would optimize the repetition number and thickness of the superlattice layer, i.e. Applicants' high and low concentration GaN layers, as shown by Guo for high crystal quality; that it would have been obvious to form the repetition number of 10 to 1000 of said higher concentration layer and said lower concentration layer and a thickness of a repetition cycle within 1 nm to 1000 nm through routine experimentation of the film deposition chemistry and parameters; and that Kawano in view of Guo discloses ranges that lie within the claimed ranges.

AMENDMENT UNDER 37 C.F.R. § 1.114(c) Attorney Docket No.: Q81505

U.S. Application No.: 10/585,744

However, the Examiner has still not responded to Applicants' arguments that modifying

the device of Kawano so as to adopt the superlattice structure of Guo would render Kawano's

device unsuitable for its intended purpose and that Kawano and Guo do not teach or suggest the

superior results provided by the present invention.

The Examiner is respectfully requested to respond to Applicants' above arguments which

were well presented in the Second Response under 37 C.F.R. § 1.116 filed March 29, 2010 in a

next communication.

Further, in the Advisory Action, the Examiner considered that the body of method claim

55 does not recite a process step.

Claim 55 has been amended to address the Examiner's point.

Allowance of claims 37 and 55-66 is respectfully requested. If any points remain in issue

which the Examiner feels may be best resolved through a personal or telephone interview, the

Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue

Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any

overpayments to said Deposit Account.

Respectfully submitted,

Registration No. 57,426

Him Chen Wantes

SUGHRUE MION, PLLC

Telephone: (202) 293-7060

Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: April 30, 2010

10